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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/030,373 | 05/20/2002 | Lars Hakan Dellden | 6688-01WOUS | 8710 |

7590 10/24/2003
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| EXAMINER |
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COOLEY, CHARLES E

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| ART UNIT | PAPER NUMBER |
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1723

DATE MAILED: 10/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,373

Applicant(s)

DELLDEN, LARS HAKAN

Examiner

Charles E. Cooley

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 is/are allowed.
- 6) ☒ Claim(s) 7-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 May 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: _____

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OFFICE ACTION

1. This application has been assigned to Technology Center 1700, Art Unit 1723 and the following will apply for this application:

a. Please direct all written correspondence with the correct application serial number for this application to Art Unit 1723.

b. Telephone inquiries regarding this application should be directed to the Technology Center 1700 receptionist at ☐(703) 308-0651 or to the Examiner at ☐(703) 308-0112. Official facsimile correspondence filed before a final office action should be transmitted to ☐(703) 872-9306. Official facsimile correspondence which responds to a final office action should be transmitted to ☐(703) 872-9306.

Priority

2. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). All of the CERTIFIED copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

Information Disclosure Statement

3. Note the attached PTO-1449 form submitted with the Information Disclosure Statement filed 22 OCT 2001.

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Drawings

4. The drawings are objected to because of the following informalities:
- a. the drawing figure does not comply with 37 CFR 1.84(u): **Numbering of views:**

(1) The different views must be numbered in consecutive Arabic numerals, starting with 1, independent of the numbering of the sheets and, if possible, in the order in which they appear on the drawing sheet(s). Partial views intended to form one complete view, on one or several sheets, must be identified by the same number followed by a capital letter. View numbers must be preceded by the abbreviation "FIG." Where only a single view is used in an application to illustrate the claimed invention, it must not be numbered and the abbreviation "FIG." must not appear.

Correction is required.

5. Applicant should verify that (1) all reference characters in the drawings are described in the detailed description portion of the specification and (2) all reference characters mentioned in the specification are included in the appropriate drawing Figure(s) as required by 37 CFR 1.84(p)(5).
6. The drawings are objected to because suitable descriptive and concise legends should be provided to label the depicted elements of the invention such as the pressure sensor 32 and control unit 28, and signal means 39 for understanding of the drawings (37 CFR 1.84(o)).
7. Applicant is required to submit a proposed drawing correction in response to this Office Action. Any proposal by the applicant for amendment of the drawings to cure defects must include a print or pen-and-ink sketch showing changes in *red ink* in accordance with MPEP § 608.02(v).

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IMPORTANT NOTE: The filing of new formal drawings to correct the noted defect may be deferred until the application is allowed by the examiner, but the print or pen-and-ink sketch with proposed corrections shown in red ink is required in response to this Office Action, and *may not be deferred*.

Specification

8. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

9. The disclosure is objected to because of the following informalities:

a. the specification should not make reference to "Fig. 1" in accordance with the above drawing objection.

Appropriate correction is required.

10. The Abstract of the Disclosure is objected to because:

a. the inclusion of legal phraseology such as "means" and "said" in the abstract is improper.

Correction is required. See MPEP § 608.01(b).

11. The title is acceptable.

12. The title is acceptable.

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Claim Objections

13. Claim 12 is objected to because it should depend from claim 7. The prior art rejection assumes claim 12 depends from claim 7.

Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 7-13 are rejected under 35 U.S.C. § 102(b) as being anticipated by Modeer (US 5,800,330).

The patent to Modeer (US 5,800,330) discloses a centrifuge including a device for indicating an undesired operating condition of a centrifugal separator comprising a centrifugal rotor 1 forming a separation chamber 6; a supply conduit 14 for supplying a liquid mixture to be separated to the separation chamber; the liquid mixture containing at least two components; at least two outlets 7, 20, or 25 for discharging separated components; respectively, out of the separation chamber; one outlet 20 of the outlets for discharging a separated liquid phase comprising one of the two components, and a first outlet conduit 21, the interior which communicates with said one outlet 20; an inlet

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valve 27 situated in the supply conduit and adjustable between open and closed positions; a first outlet valve situated in the first outlet conduit and adjustable between open and closed positions (col. 4, lines 11-16), the valves being adjustable in at least partly open normal valve positions for passing normal flows through the supply and outlet conduits during normal operation of the centrifugal separator (col. 3, lines 59-63 and col. 4, lines 13-16); a pressure sensor 28 for detecting the pressure in the first outlet conduit 21 upstream the outlet valve; a signal means 35 for generating an error signal, and a control unit 30 for activating the signal means to generate the error signal; wherein the second of the separated components is constituted by sludge; the second outlet 7 of the centrifugal separator is formed by a sludge discharge means 5 for intermittent discharge of the sludge; the centrifugal rotor 1 forms an outlet chamber 18 for said one component; and a paring disc 20 is arranged the outlet chamber and forms said one outlet 20; the control unit 30 controlling the valves.

* * *

With regard to the above rejections, the operational and functional language of the claims has been considered but fails to impart or invoke any further structure or means (per 35 USC 112, sixth paragraph and MPEP 2181) to the pending apparatus claims which defines over the applied prior art. Consequently, since all of the claimed structure is met by the applied prior art, the rejections under 35 USC 102 are deemed proper. The claims are replete with "adapted to" clauses yet such clauses are not deemed to be of any patentable consequence because it has been held that the

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recitation that an element is "adapted" to perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. For defining the various functions of the control unit set forth in claims 7-13 in a patentably distinct manner, Applicant may wish to employ means plus function language in lieu of the "adapted to" language.

Allowable Subject Matter

16. Claims 1-6 are allowable over the prior art of record.
17. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The prior art of record does not teach or fairly suggest the recited method steps of operating the centrifugal separator, sensing a normal operating pressure in the first outlet conduit, when a normal flow of the liquid mixture prevails in the supply conduit and a normal flow of the liquid phase prevails in the first outlet conduit, at least substantially decreasing the flow of the liquid mixture through the supply conduit from the normal flow of the liquid mixture during a predetermined period of time, at least substantially decreasing the flow of the liquid phase through the first outlet conduit from the normal flow of the liquid phase during the same predetermined period of time, sensing the course of the pressure change in the outlet conduit from the normal operating pressure during the predetermined period of time, and generating an error

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signal in response to the sensed course of pressure change when this deviates from an expected normal course of pressure change.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited prior art discloses control arrangements for centrifuges, some which respond to the sensing of pressure parameters in the centrifuge.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Charles Cooley whose telephone number is ☎ (703) 308-0112.

20. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is ☎ (703) 308-0651.

Dated: 16 October 2003



**Charles Cooley
Primary Examiner
Art Unit 1723**